Please substitute the paragraph at page 9, line 16 to page 10, line 3 with the following amended paragraph:

Figures 6A-G show that BDNF supports the survival of cardiac microvascular endothelial cells. Panels A and B show flow cytometric analysis of cardiac microvascular endothelial cells incubated with anti-CD31 antisera (panel A) or control IgG (panel B). 97% of cells exhibit CD31 reactivity and 1% react with control IgG. Panel C shows RT-PCR analysis of transcripts for BDNF and kinase active trk B mRNA in cardiac microvascular endothelial cells ("ECs") and adult murine brain (B). Amplification of BDNF (360 bp) and the regions of the kinase domain of trk B (571 bp) are detectable in cardiac endothelial cells and adult brain samples. To ensure the absence of DNA contamination, RNA samples were amplified using primers without the reverse transcription step and these reactions yielded no products (no RT). Panels D, E, and F show TUNEL analysis of microvascular endothelial cells. ECs were cultured in media containing 10% serum (panel D), or in media containing 0% serum (panels E and F) in the presence of BDNF (100ng/ml) (panel F) for 48 hours. 1500 cells per sample were analyzed and the mean and standard deviation of four samples is indicated. Results are representative of two experiments performed in quadruplicate on cultures from different litters of animals (Magnification: 20X). Panel G shows flow cytometric analysis of annexin V binding. Cardiac microvascular endothelial cells were cultured in the indicated conditions in the presence of BDNF (25ng/ml) or VEGF (10ng/ml) for 48 hours prior to incubation with FITC-annexin V and propidium iodide for flow cytometry of 1 x 10^4 cells per condition. Results are representative of two independent experiments performed on cultures from different litters of animals.

A2

In The Claims:

Please cancel claims 1-6, 17, 20-25, 28, and 31-54 and add new claim 55 as follows:

55. (New) A method according to claim 7, wherein said pathological disorder is a vascular disorder.

A3